

FIG.1

BASE STATION

MOBILE STATION

ANTENNA

5

FIG.2 FIG.3 FIG.6 FIG.7 FIG.8 FIG.11 FIG.12

ANTENNA

101 201 TRANSMISSION/RECEPTION SWITCHING SECTION

102 202 RADIO RECEPTION PROCESSING SECTION

10 103 203 ADJACENT CELL PILOT EXTRACTING SECTION

104 204 RECEPTION POWER MEASURING SECTION

105 205 PILOT EXTRACTING SECTION

106 206 CHANNEL ESTIMATION SECTION

107 207 DEMODULATION SECTION

15 301 COMBINING SECTION

302 DECODING SECTION

RECEPTION DATA

TRANSMISSION DATA

401 CODING SECTION

20 402 MODULATION SECTION

403 RADIO TRANSMISSION PROCESSING SECTION

404 TRANSMISSION ANTENNA SELECTING SECTION

FIG.3 FIG.7 FIG.8 FIG.11 FIG.12

25 108 208 RECEPTION POWER MEASURING SECTION

FIG.3 FIG.7 FIG.12

109 209 POWER RATIO CALCULATING SECTION

405 TRANSMISSION POWER CONTROL SECTION

5 FIG.4

AVERAGE INTERFERENCE POWER

CONVENTIONAL METHOD

EMBODIMENT 2

10 FIG.5

ANTENNA

BASE STATION

MOBILE STATION

15 FIG.6

110 210 COMBINING SECTION

N

FIG.7

20 111 211 COMBINING SECTION

FIG.8

112 212 MCS DETERMINING SECTION

406 MCS COMPARING SECTION

25

FIG.9

MCS LEVEL

RECEPTION POWER IN MOBILE STATION

FIG.10

START

ST10 MEASURE RECEPTION POWER $|p_{11}|$, $|p_{12}|$
5 ST20 OBTAIN MCS LEVELS L_1 , L_2
ST30 $L_1=L_2$?
ST40 SELECT ANTENNA WITH HIGHER MCS LEVEL
ST50 MEASURE RECEPTION POWER $|p_{21}|$, $|p_{22}|$
ST60 $|p_{21}| < |p_{22}|$?
10 ST70 SELECT ANTENNA 1
ST80 SELECT ANTENNA 2

FIG.11 FIG.12

407 AVERAGING SECTION